

Delta Stewardship Council Early Action Project Review Application

10/5/2010

1. Applicant Information

Request:

Inclusion as an early action: Rock Slough Fish Screen

Name:

Contra Costa Water District

Legal Status: County Water District organized under Division 12, Section 30000 *et seq.* of the Water Code

Address: 1331 Concord Ave. Concord, CA. 94525

Contact Information: Greg Gartrell

Role: Assistant General Manager

Address: P.O. Box H20, Concord, CA 94520

Email: ggartrell@ccwater.com

Telephone: (925) 688-8100

Project Narrative, including legal authority and rationale for urgency.

The Contra Costa Pumping Plant Mitigation Program (Program) was established to meet the statutory requirements of Public Law 102-575, Title XXXIV, the Central Valley Project Improvement Act (CVPIA), as specified in Section 3406(b)(5). This Program is designed to mitigate fishery impacts resulting from operations of the Contra Costa Canal Pumping Plant No. 1. The Contra Costa Canal Intake (Rock Slough) Fish Screening Project (project), a feature of the Program, is designed to comply with the Los Vaqueros Biological Opinion for delta smelt as issued by the U.S. Fish and Wildlife Service in 1993 (File Number 1-1-93-F-35). The Biological Opinion requires that entrainment losses of delta smelt (drawn into the canal and Pumping Plant No. 1) be reduced through screening of the Rock Slough. Reclamation issued a Finding of No Significant Impact for the project in 1997 but construction was delayed due to lack of funding. On April 15, 2009 Secretary of the Interior Ken Salazar announced that \$20 million of American Recovery and Reinvestment Act funding was being allocated to build the Contra Costa Canal fish screen. Construction of the Rock Slough Fish Screen began in September of 2009 and is currently underway.

Rationale for Urgency

The project is currently underway and supports the coequal goals by reducing impacts to fisheries while improving water supply reliability and operational flexibility.

Project Physical Location

The project is located in the south Sacramento-San Joaquin River Delta on the eastern border of the City of Oakley in eastern Contra Costa County. The beginning of the Contra Costa Canal is demarcated by the Rock Slough Headworks (trash rack) approximately 400 feet from Rock Slough. This structure is located approximately four miles southeast of the intersection of State Route 4 (SR 4) and Cypress Road, near the terminus of Rock Slough. Rock Slough originates approximately 3.25 miles farther east, near Old River. Figure 1 provides a map of the project location.

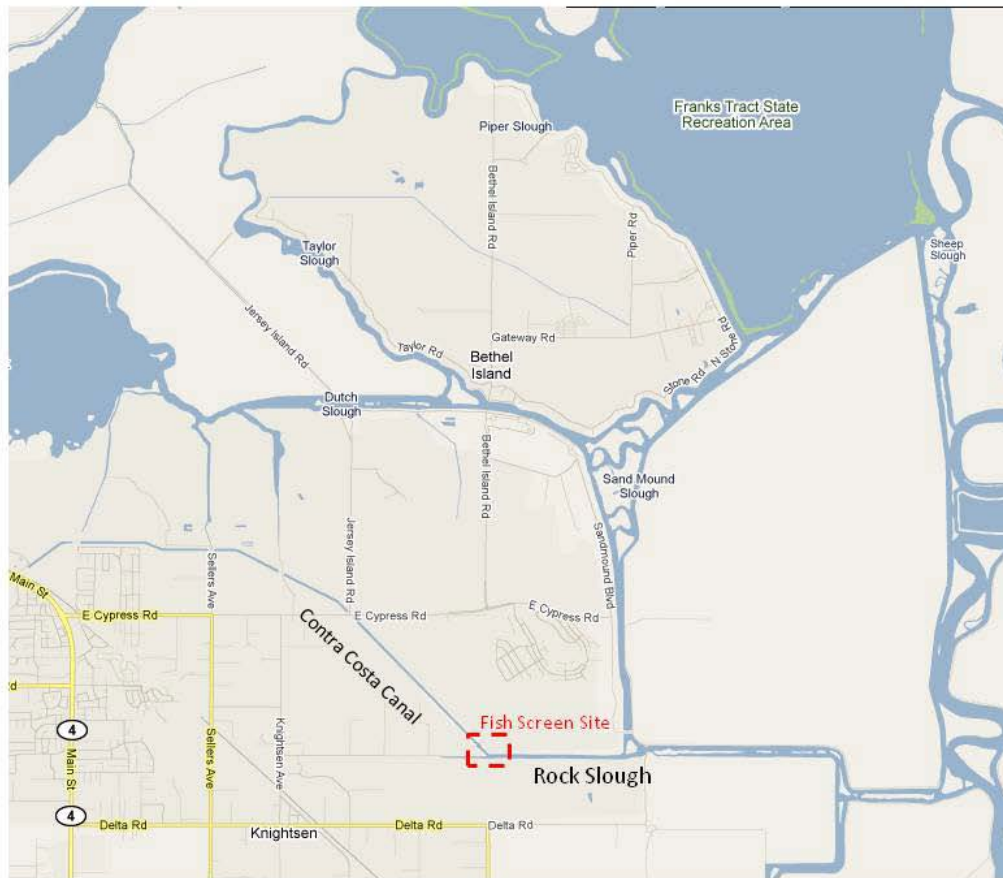


Figure 1 Map of Rock Slough Fish Screen Project Area, the beginning of the Contra Costa Canal.

2. Project Review by Public Agencies

Table 1 provides a timeline and list of permit history for the Rock Slough Fish Screen project. We have also attached a copy of the 2009 CEQA addendum to the 1997 Negative Declaration and the 2009 Notice of Determination. All of the permitting materials listed in Table 1 are available upon request but the size of the files makes it prohibitive to include all of them with this application.

Table 1 Public Agency Review History for Rock Slough Fish Screen

Environmental Compliance	Agency	Date Permit or Agreement Obtained
State	Central Valley Regional Water Quality Control Board 401 Permit	August 2009
	CA Department of Fish and Game 1600 Permit	September 2009
	State Historic Preservation Office MOU	May 2009
	Central Valley Regional Water Quality Control Board Dewatering Permit	July 2009
	CEQA Compliance (NOD)	June 2009
Federal	US Army Corps of Engineers 404 Permit	September 2009
	National Marine Fisheries Letters of Concurrence	August 2009
	US Fish and Wildlife Coordination Act Letter	September 2009
	US Bureau of Reclamation NEPA EA/FONSI/IS	September 1997
	Western Area Power Association Agreement	November 2009
	Supplemental NEPA	September 2009

Local Government Discretionary Approval(s):

Yes ____ No X If yes, describe:

Delta Protection Commission Consistency Approval(s):

Yes ____ No X If yes, describe:

Bay Conservation and Development Commission Permit:

Yes ____ No X If yes, describe:

State Lands Commission:

Yes ____ No X

CalTrans:

Yes ____ No X

State Water Resources Control Board Permit:

Yes _ _ No X

Regional Water Quality Control Board

Yes X No ____ Regional Board Number: 5

California Dept. of Toxic Substances Control

Yes ____ No X

California Department of Fish and Game Streambed Alteration Permit:

Yes X No ____

DF&G Take Authorization:

Yes __ No X

Other DF&G Permit:

Yes ____ No X

U.S. Army Corps of Engineers:

Yes ☒ No ☐ Public Notice Number: SPK-2009-00600

U.S. Fish and Wildlife Service: Take Authorization

Yes ☒ No ☐

Biological Opinion:

Yes ☐ No ☐

NOAA Fisheries Service: Take Authorization

Yes ☒ No ☐

Biological Opinion:

Yes ☐ No ☒

U.S. Coast Guard:

Yes ☐ No ☒

Federal Funding:

Contra Costa Water District and the U.S. Bureau of Reclamation are funding this project. The total project cost is approximately \$28M. Approximately \$27M of the funding came from the American Recovery and Reinvestment Act and \$1.2M came from CCWD.

3. Environmental Impact Documentation

a) Is the project statutorily or categorically exempt from the need to prepare any environmental documentation?

No. All environmental documentation and permits have been completed, with CCWD serving as CEQA lead agency and Reclamation serving as NEPA lead agency. The EA/FONSI/IS was updated in September 2009, satisfying NEPA requirements and the Notice of Determination (NOD) was signed June 2009, satisfying CEQA requirements. See Table 1 for more details.

b) Has a government agency other than the Council, serving as the lead agency, adopted a negative declaration or certified an environmental impact report or environmental impact statement on the project?

Yes, see questions 2 & 3a.

4. Assessment against Delta Reform Act Policy Objectives

(a) Manage the Delta's water and environmental resources and the water resources of the state over the long term.

Positive X Negative Neutral Unknown

Rational, magnitude of effect (if positive or negative) and documentation:

Completion of this project will enable CCWD to better serve our customers and better protect sensitive fisheries. Screening Rock Slough will allow this intake to be used more frequently, decreasing the amount of water needed to be released from Los Vaqueros Reservoir, thereby increasing amount of water stored in Los Vaqueros Reservoir available for emergencies and drought. The Project does not result in an increase in water diversions. It eliminates fish losses both to direct diversion and to predation in the existing canal intake. It allows improved flexibility and coordination with the SWP and CVP to improve fishery protection overall.

- (b) Protect and enhance the unique cultural, recreational, and agricultural values of the California Delta as an evolving place.

Positive Negative Neutral X Unknown

Rational, magnitude of effect (if positive or negative) and documentation:

- (c) Restore the Delta ecosystems, including its fisheries and wildlife, as the heart of a healthy estuary and wetland ecosystem.

Positive X Negative Neutral Unknown

Rational, magnitude of effect (if positive or negative) and documentation:

This fish screen will better protect sensitive fish and the mitigation land acquired for this construction project will create 30 new acres of habitat. The ratio of land impacted during construction of this project to the amount of land provided for mitigation is 45:1.

- (d) Promote statewide water conservation, water use efficiency, and sustainable water use.

Positive X Negative Neutral Unknown

Rational, magnitude of effect (if positive or negative) and documentation:

Screening Rock Slough will allow CCWD to optimize their operations to maximize fisheries protection and minimize releases from storage. Screening Rock Slough will allow it to be used more frequently when water quality is good and will possibly decrease the amount of water released from Los Vaqueros. Rock Slough intake is the least energy intake when the water quality is good and shifting a larger percentage of pumping to this intake will decrease the overall energy used and decrease the carbon footprint of operations.

- (e) Improve water quality to protect human health and the environment consistent with achieving water quality objectives in the Delta.

Positive X Negative Neutral Unknown

Rational, magnitude of effect (if positive or negative) and documentation:
Water quality delivered to customers would improve as a result of this project.
Increased flexibility will enable higher quality water to be delivered more often and more reliably.

- (f) Improve the water conveyance system and expand statewide water storage.

Positive X Negative Neutral Unknown

Rational, magnitude of effect (if positive or negative) and documentation:

Completion of the Rock Slough Fish Screen will improve operational flexibility and protect fisheries. Screening Rock Slough will allow CCWD to optimize their operations to maximize fisheries protection and minimize releases from storage. Screening Rock Slough will allow it to be used more frequently when water quality is good and will decrease the amount of water released from Los Vaqueros required for blending to meet water quality delivery goals.

- (g) Reduce risks to people, property, and state interests in the Delta by effective emergency preparedness, appropriate land uses, and investments in flood protection.

Positive X Negative Neutral Unknown

Rational, magnitude of effect (if positive or negative) and documentation:

Flow control structure allows shutdown of the canal intake, reducing flood damage until canal replacement is completed. Once canal replacement is complete the screen provides a backup system for reducing flood risk after earthquake should pipe fail.

- (h) Establish a new governance structure with the authority, responsibility, accountability, scientific support, and adequate and secure funding to achieve these objectives.

Positive Negative Neutral X Unknown

Rational, magnitude of effect (if positive or negative) and documentation:

5. Assessment of Administration and Implementation Processes

Cost of Project:

Financing (provide information on public and private sources of funding, including funds on hand or legally pledged or obligated and the source of those funds)

Contra Costa Water District and the U.S. Bureau of Reclamation are funding this project. The total project cost is approximately \$28M. Approximately \$27M of the funding came from the American Recovery and Reinvestment Act and \$1.2M came from CCWD.

Identify any public agencies whose actions or decisions are essential for the proposed action to succeed. Provide evidence of their approval and support of the proposed action.

All necessary agencies have reviewed and approved this project. Please see Table 1 for a complete list of agency permits and reviews. Due to the large size of the electronic files, only those documents that pertain to CEQA are included in Attachment A with this electronic application. The permits listed above can be provided upon request.

If real property must be acquired or use altered for the success of the project, identify the owners of that property and information on how ownership or use change will occur.

The permanent property needed for the fish screen is approximately 5.1 acres while temporary construction areas are approximately 21.5 acres. An onsite electrical building is planned and will include electrical distribution, instrumentation and controls that will be used to operate the screen on site.

Just over 31 acres of mitigation land was also acquired to offset wetland impacts during construction and operation of the Rock Slough Fish Screen. The total amount of wetlands impacted during construction was 0.7 acres, making the mitigated to impact acre ratio 45:1. Table 2 provides a breakdown of mitigation land.

Table 2 Mitigation land for Rock Slough Fish Screen

Completed and Proposed Mitigation			
Feature	Implemented Mitigation (acres)	Additional Proposed Mitigation (acres)	Ratio of Restored:Impacted For Mitigation
Seasonal Wetland	30.5 restored wetlands at Big Break		30.5 acres (restored/created) : 0.38 acre (impacted) Mitigation Ratio = 80:1
Open Water	0.3 created wetlands at Kimball Island	0.86 created on-site	1.16 (created) : 0.155 acre (impacted) Mitigation Ratio = 8:1
Drainage Ditch	0.00	0.06 restored on-site	0.06 acre (created) : 0.038 acres (impacted) Mitigation Ratio = 2:1
Total	30.8	0.92	31.72 acres : 0.70 acres Mitigation Ratio =45:1

Provide a time line for the proposed plan or project, including major milestones through completion.

Construction of the Rock Slough Fish Screen began in the fall of 2009 and will continue until the September 2011. Table 3 provides a timeline of the specific construction activities.

Table 3 Schedule of Construction Activity for Rock Slough Fish Screen

Time Frame	Activity Type
September 2009	Site Clearing
September 2009	Access Road
October 2009	Fish Rescue
October 2009	Cofferdam Sheet Pile Installation
November 2009	New Levee
December 2010	Dewatering
May 2010	WAPA Relocation
July through September 2010	General Grading and Earthwork
September through December 2010	Foundation Preparation and Installation
January through August 2011	Fish Screen Structure
August through September 2011	Roadway Paving

Describe how success or failure of the plan or project will be determined, including measures proposed, time frame and public agency responsible for judging success:

Upon completion of construction, CCWD's operational flexibility will increase, as the requirement in fisheries and water rights permits to avoid the use of unscreened intakes in fish-sensitive periods will no longer apply to the Rock Slough Intake. Success in avoiding take of listed fish species will be confirmed by continuing monitoring at the intake.

Describe the major benefits that can result from the proposed plan or project, including identification of beneficiaries and any information on the magnitude and timing of benefits received:

Implementing the proposed project will provide the following environmental benefits:

- ▶ The Contra Costa Canal intake will include a state of the art fish screen that will minimize and avoid impacts to sensitive smelt and salmonids. Once the Contra Costa Canal is screened, all of CCWD's intakes will be screened. Species that will benefit from a screen between Rock Slough and the Contra Costa Canal include fall and winter-run Chinook salmon, Central Valley ESU steelhead, American shad, longfin smelt, Sacramento blackfish, green sturgeon, delta smelt and Sacramento splittail.
- ▶ The project will contribute to the overall goals and specific objectives of fishery restoration programs such as the Anadromous Fish Restoration Program of the CVPIA and to meet the requirements of the Los Vaqueros Biological Opinion.
- ▶ Setback levees will be constructed to surround and protect adjacent property from the entrance to the canal, which will be enlarged to accept the fish screen structure at the confluence of Rock Slough. New levees will be constructed adjacent to the fish screen to address the latest water conveyance levee design criteria.
- ▶ Water quality delivered to customers will improve as a result of this project. Increased flexibility will enable CCWD to deliver higher quality water more often and more reliably. Screening Rock Slough will allow this intake to be used more frequently, decreasing the amount of water needed to be released from Los Vaqueros Reservoir, thereby increasing amount of water stored in Los Vaqueros Reservoir available for emergencies and drought.

If the proposed plan or project fails, what is done? What additional costs could be incurred and how will they be financed? Identify any lasting effects or changed options for future policy making:

If the proposed project fails, operations of the Rock Slough intake would remain similar to historical operations.

6. Scientific justification (to address requirement for Council use of best available science,

Water Code section 85302(g)):

Attach description of scientific justification for the proposed plan or project and provide any pertinent documents. Address the criteria identified in Section 3 when preparing the scientific justification. Provide complete list of all scientific references cited.

The value and effectiveness of positive barrier screens in reducing entrainment has been recognized (Swanson et al. 2004; Swanson et al. 2005; Young et al. 2010, White et al. 2007). The screen efficiencies of positive barrier fish screens have been documented (Weisberg et al 1987). Appropriate screen dimensions (mesh size and vertical bar interval) for delta smelt have been determined based on body size measurements of delta smelt (Young and Cech, 1997) based on the method of Margraf et al. (1985). Fish screen criteria of approach velocity and sweeping velocity are employed to reduce injury to fish from contact and impingement on the screens.

References:

- Margraf, F.J., Chase, D.M and K. Strawn. 1985. Intake Screens for Sampling Fish Populations: The Size-Selectivity Problem. *North American Journal of Fisheries Management*. 5:210-213.
- Swanson. C. P. S. Young, and J. J. Cech, Jr. (2005) Close encounters with a fish screen: integrating physiological and behavioral results to protect endangered species in exploited ecosystems. *Transactions of the American Fisheries Society* 134:1111-1123.
- Swanson. C. P. S. Young, and J. J. Cech, Jr. (2004) Swimming in two-vector flows: performance and behavior of juvenile Chinook salmon near a simulated screened water diversion. *Transactions of the American Fisheries Society* 133:265-278.
- Weisberg, S.B., Burton, W.H., Jacobs, F., and E.A. Ross, 1987. Reductions in Ichthyoplankton Entrainment with Fine, Mesh, Wedge-Wire Screens, *North American Journal of Fisheries Management* 7:386-393.
- White, D. K., Swanson, C., Young, P. S., Cech, Jr., J. J., Chen, Z. and M. L. Kavvas. 2007. Close encounters with a fish screen II: delta smelt behavior before and during screen contact. *Transactions of the American Fisheries Society*. 136:528-538.
- Young, P.S., and J.J. Cech, Jr. 1997. Calculations of Required Screen Mesh Size and Vertical Bar Interval Based on Delta Smelt Morphometrics. *Interagency Ecological Program Newsletter*. 10:19-20.
- Young, P.S., Swanson, C. and Cech, Jr, J.J. 2010. Close Encounters with a Fish Screen III. Behavior, Performance, Physiological Stress Responses, and Recovery of Adult Delta Smelt Exposed to Two-Vector Flows near a Fish Screen.

I certify that all of the information submitted is complete and accurate to the best of my knowledge and that all attached exhibits are full, complete and correct. I certify that I understand that omitted or insufficient information can delay consideration of this application. I certify that this application is not complete until accepted by the Council at a regularly scheduled meeting. I authorize the Council, its staff or other authorized personnel to share this information publicly and authorize their collection of additional information relevant to this application.

Title: Assistant General Manager

Attachment A

Rock Slough Fish Screen CEQA Related Documents

7. Applicant certifications and authorizations

I certify that all of the information submitted is complete and accurate to the best of my knowledge and that all attached exhibits are full, complete and correct. I certify that I understand that omitted or insufficient information can delay consideration of this application. I certify that this application is not complete until accepted by the Council at a regularly scheduled meeting. I authorize the Council, its staff or other authorized personnel to share this information publicly and authorize their collection of additional information relevant to this application.

 10/5/2010

Signature of applicant or applicant's representative Date

Printed name: Greg Gartrell

Title: Assistant General Manager

Notice of Determination

Appendix D

To: Office of Planning and Research
P.O. Box 3044, Room 212
Sacramento, CA 95812-3044

County Clerk
County of Contra Costa

555 Escobar Street/P.O. Box 350
Martinez, CA 94553

From: (Public Agency) Contra Costa Water District

2411 Bisso Lane/P.O. Box H2O

Concord, CA 94524-2099

(Address)

Contact Person Mark Seedall, Principal Planner

Phone 925 688-8119

Subject: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (If submitted to Clearinghouse) 97092079

Project Title Contra Costa Pumping Plant Mitigation Program- Contra Costa Canal (Rock Slough) Fish Screen Project

Project Location (include county)

Approximately 4 miles southeast of the intersection of State Route 4 and Cypress Road, near the terminus of Rock Slough (see attached Figure).

Project Description:

On April 15, 2009 the Secretary of the Interior announced that \$20 million of America Recovery & Reinvestment Act funding is being allocated to build the Contra Costa Canal fish screens. The Contra Costa Canal fish screens will mitigate fishery impacts resulting from operation of the Contra Costa Canal Pumping Plant No. 1 as well as support compliance with the Los Vaqueros Biological Opinion and the Central Valley Project Improvement Act. On October 20, 1997, the California Dept. of Water Resources adopted a CEQA Negative Declaration in support of the United States Bureau of Reclamation (Reclamation) design of the Project. The Project was designed by Reclamation and ready for construction bids in 2000. However, the Project was delayed due to limited funding and complications associated with land acquisition. CCWD prepared this Addendum as a responsible agency that will now be implementing portions of this Project. See attached Figure.

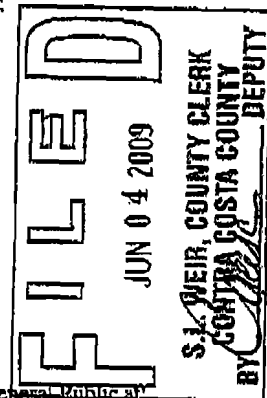
This is to advise that the Contra Costa Water District Board of Directors has approved the project described above on

☐ Lead Agency ☒ Responsible Agency

June 3, 2009 and has made the following determinations regarding the project described above:

(Date)

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
☒ An Addendum was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures ☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☐ was [☒ was not] adopted for this project.
6. Findings [☐ were [☒ were not] made pursuant to the provisions of



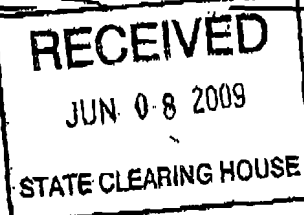
This is to certify that the record of project approval and Addendum and related documentation is available to the General Public at
Contra Costa Water District, 2411 Bisso Lane, Concord, CA 94524

Signature (Public Agency) [signature] Assistant General Manager

Date June 4, 2009

Title

Date received for filing at OPR:



Revised 2004

Contra Costa Pumping Plant Mitigation Program

CONTRA COSTA CANAL INTAKE (ROCK SLOUGH) FISH SCREEN PROJECT

**CEQA Addendum No. 2
Dewatering Plan Modification
NEGATIVE DECLARATION (ND)
As Adopted by California Dept. of Water Resources
On October 22, 1997
State Clearinghouse Number 97092079**

**September 24, 2010
Contra Costa Water District**

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SECTION 1

BACKGROUND AND PURPOSE OF THIS ADDENDUM

1.1 BACKGROUND

Contra Costa Pumping Plant Mitigation Program, Contra Costa Canal Intake (Rock Slough) Fish Screening Project The Contra Costa Pumping Plant Mitigation Program (Program) was established to meet the statutory requirements of Public Law 102-575, Title XXXIV, the Central Valley Project Improvement Act, as specified in Section 3406(b)(5). This Program is designed to mitigate fishery impacts resulting from operations of the Contra Costa Canal Pumping Plant No. 1. The Contra Costa Canal Intake (Rock Slough) Fish Screening Project (Project), a feature of the Program, is designed to comply with the Los Vaqueros Biological Opinion for delta smelt as issued by the U.S. Fish and Wildlife Service in 1993.¹ The Biological Opinion requires that entrainment losses of delta smelt (fish drawn into the canal and Pumping Plant No. 1) be reduced through screening of the Rock Slough intake.

American Recovery and Reinvestment Act of 2009 (ARRA) Funding On April 15, 2009 Secretary of the Interior Ken Salazar announced that \$20 million of ARRA funding was being allocated to build the Contra Costa Canal fish screens. In summer 2010 the ARRA funding for this project was increased to approximately \$28 million.

In the fall of 2009 CCWD was awarded a contract by the United States Bureau of Reclamation for Phase 2 of the Rock Slough Fish Screen Project. Phase 2 included obtaining needed land for construction and operation of the Rock Slough Fish Screen, clearing and grubbing the construction staging areas and access roads, constructing new access roads, installing three coffer dams and setback levees. CCWD completed this work in November 2009. The Phase 3 project is to construct the fish screen itself. It had been expected that Phase 3 work on the fish screen would begin immediately following phase 2, but due to federal contracting and procurement requirements Reclamation work on the Phase 3 portion of the fish screen commenced in July 2010. Reclamation expects that it will complete its work by the end of 2011.

LOCATION: The Project site is located in the south Sacramento-San Joaquin River Delta on the eastern border of the City of Oakley in eastern Contra Costa County (See **Figure 1**). The beginning of the Contra Costa Canal is demarcated by the Rock Slough Headworks [trash rack] approximately 400 feet from Rock Slough. This structure is located approximately 4 miles southeast of the intersection of State Route 4 (SR 4) and Cypress Road, near the terminus of Rock Slough. Rock Slough originates approximately 3.25 miles farther east, near Old River. The fish screen structure, approximately 320-feet long, would be located at the entrance of the Contra Costa Canal in Rock Slough (See **Figure 2**).

¹ Los Vaqueros Biological Opinion, U.S. Fish and Wildlife Service, 1993.

Project activity will be limited to two areas:

1. Constructing the fish screen requires dewatering wells to keep the construction area between the three coffer dams dry. This dewatered ground water has been discharged to irrigators on lands adjacent to the project site. The Central Valley Regional Water Quality Control Board (CVRWQCB) approved this dewatering plan via General Order No. 2003-0003-DWQ-008. (See **Figure 3.**) Dewatering during the fall of 2010 and winter of 2011 will be into Rock Slough and a new permit for low threat discharges to surface waters (Order No. R5-2008-0081) is required from the CVRWQCB. The Bureau of Reclamation will apply for this modified permit. For redirecting storm water, project activity will be limited to the area of the Rock Slough extension just west of the coffer dam and Rock Slough. (See **Figure 3.**)
2. For redirecting storm water, project activity will be limited to the area of the Rock Slough extension just west of the coffer dam and Rock Slough. (See **Figure 3.**)

REFERENCE DOCUMENTS: The following documents are **incorporated** in the Negative Declaration by reference:

- Contra Costa Pumping Plant Mitigation Program, Contra Costa Canal Intake (Rock Slough) Notice of Determination and Negative Declaration, State of California Department of Water Resources October 22, 1997.
- Finding of No Significant Impact, Environmental Assessment and Initial Study, Contra Costa Pumping Plant Mitigation Program, Contra Costa Canal Intake (Rock Slough), United States Bureau of Reclamation, September 5, 1997.
- Contra Costa Canal Intake (Rock Slough) Fish Screen Project Negative Declaration Addendum, June 3, 2009. Adopted by the CCWD Board of Directors on June 3, 2009. A Notice of Determination (NOD) was filed on June 8, 2009.

1.2 PURPOSE OF THIS ADDENDUM

The State of California through the California Department of Water Resources adopted a CEQA Negative Declaration on October 20, 1997 in support of the United States Bureau of Reclamation (Reclamation) design of the Project. Reclamation approved a Finding of No Significant Impact on September 17, 1997. The Project was designed by Reclamation and ready for construction bids in 2000. However, the project was delayed due to limited funding and complications associated with land acquisition. The Contra Costa Water District (CCWD) has prepared this addendum as a responsible agency that will now be implementing portions of this Project.

The CEQA Guidelines (Sections 15162 and 15164) require that a lead or responsible agency prepare an addendum to a previously certified EIR or Negative Declaration if some changes or additions to the environmental evaluation of a project are necessary but none of the following occurs:

- There are no substantial changes in the project which require major revisions to the Negative Declaration or a substantial increase in the severity of previously identified significant effects;

-There are no substantial changes with respect to the circumstances under which the project is undertaken which require major revisions to the Negative Declaration; or

-No new information of substantial importance, which could not have been known with the exercise of reasonable diligence at the time of Negative Declaration certification, shows any of the following:

- (i) the project will have one or more significant effects not discussed in the Negative Declaration,
- (ii) the project will result in impacts substantially more adverse than those disclosed in the Negative Declaration,
- (iii) mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponent declines to adopt it, or
- (iv) mitigation measures or alternatives that are considerably different from those analyzed in the Negative Declaration would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt it.

This addendum documents that the Project modifications do not trigger any of the conditions described above.

1.3 PREVIOUS ADDENDA

- There has been one previous addendum for the Contra Costa Pumping Plant Mitigation Program- Contra Costa Canal (Rock Slough) Fish Screening Project, Contra Costa Canal Intake (Rock Slough) Fish Screen Project Negative Declaration Addendum, June 3, 2009.

SECTION 2

DESCRIPTION OF PROPOSED CANAL FISH SCREEN PROJECT MODIFICATIONS

2.1 PROJECT DESCRIPTION

Project Changes

The proposed Project is largely the same as that considered previously. CCWD will work with Reclamation to obtain a permit as required from the following agency:

- Central Valley Regional Water Quality Control Board Waste Discharge Requirements for Dewatering and Low Threat Discharges to Surface Waters (Order No. R5-2008-0081): dewatering into Rock Slough will be implemented consistent with Central Valley Regional Water Quality Control Board requirements.

The project consists of two components:

1. Dewatering. Dewatering will be required to keep the work area dry while the screen is being installed as well as during the earth work that is necessary to construct the new water conveyance levees and to remove the existing levees. Three coffer dams were constructed in the fall of 2009. Two coffer dams are within Rock Slough to isolate the work area from the Delta and another coffer dam downstream of the fish screen within the unlined canal to isolate the work area from the Contra Costa Canal (see **Figure 3**).

The limits of dewatering are contained within the work area described above and all discharge from this activity is currently sent to land for irrigation. However, in order to alleviate excess flooding of irrigation water on the adjoining property, especially during the winter, it is proposed that the current dewatering system be modified so as to provide a secondary option to discharge water into the Rock Slough. Currently the dewatering system is pumping at maximum load [.3million gallons per day [MGD]) to nearby irrigators and will continue to do so for remainder of 2010. As the foundation for the fish screen progresses, dewatering requirements can be reduced. It is anticipated that the pumps will be reduced to .2MGD for the period from February to July, 2011 with the entire system being taken out of service in July, 2011. The Central Valley Regional Water Quality Control Board Order No. R5-2008-0081 requirements limit the discharge to Rock Slough to .25MGD, and any flows in excess of this amount will be provided to nearby irrigators for land application.

2. Storm Water Control. The current Storm Water Pollution Prevention Plan (SWPPP) documents that storm water runoff will be contained within the work area and that there will be no runoff from the site. Subsequently it was noted that storm water from the City of Oakley will discharge into the Rock Slough Extension via the existing storm water drainage system. Historically, the Rock Slough Extension was directly connected to Rock Slough, but installation of the temporary cofferdam for construction has isolated the Extension. As such, storm water flow into the Extension has the potential to overtop the cofferdam and flood the construction area. Therefore, a contingency plan is proposed to pump excess water directly from the Rock Slough Extension back to Rock Slough in the event that the work

area comes under threat of flooding. This activity will be periodic, depending on rain events and would effectively re-establish the connection between the surface waters of Rock Slough and Rock Slough Extension.

ADDITIONAL INFORMATION:

Environmental Setting. The proposed Project involves the area just east of the four mile portion of the Contra Costa Canal, an artificial, earth-lined waterway that runs through mostly undeveloped area, much of which is planned for major urban development. The 21,000 feet of the unlined portion of the Contra Costa Canal from the Rock Slough Headworks to Pumping Plant No. 1(PP1) is planned to be placed into a large diameter concrete lined pipeline. The pipeline work will be completed in phases as funding becomes available. Approximately 2,000 feet of the unlined Canal from Marsh Creek to PP1 has been placed into a pipeline during 2009.

2.2 CONSTRUCTION

CONSTRUCTION DURATION AND PROJECT OPERATIONS

Construction of the Rock Slough Fish Screen commenced in September 2009 and it is anticipated that it can be completed by July 2011. Starting in September 2009 construction, staging, and access areas required (including access roads) for completion of the fish screen structure were cleared and grubbed during this least sensitive time period to minimize and avoid impacts to nesting birds, burrowing owls and giant garter snake. During this time a giant garter snake exclusion fence was installed around the work areas.

In October 2009 coffer dams were installed upstream and downstream of the fish screen structure as well as downstream of the fish screen within the unlined portion of the Contra Costa Canal to minimize and avoid impacts to sensitive aquatic species including smelt, green sturgeon and salmonids. Prior to installation of the coffer dams, the work area was cleared of fish. Between October 2009 and March 2010 the new levees were constructed that surround the expanded after bay behind the fish screen.

To allow for dewatering flows to be diverted to Rock Slough, piping and pumping facilities will be installed from the dewatering wells to Rock Slough. The existing piping carrying dewatering flows to the irrigation facilities will remain in place. For storm water control, piping and pumping facilities will be constructed between the Rock Slough Extension and Rock Slough. All pipe and pumping facilities will be installed above-ground in established construction work zones. Refer to **Figure 3**.

Construction of the fish screen structure is expected to be complete in 2011.

SECTION 3

ANALYSIS OF POTENTIAL ENVIRONMENTAL EFFECTS

The Contra Costa Canal Intake (Rock Slough) Fish Screening Project (including the 1997 Draft & Final EA/IS) focused on evaluation of environmental issues associated with project construction and operations. These issues included: seismicity, land use and planning, air quality, noise, hazards, water quality, vegetation and wildlife, fisheries, special status species, and cultural resources. These issues are re-evaluated in this addendum for the fish screen dewatering and control of storm water. This evaluation determines whether these proposed changes to the Project would result in any new significant impacts or substantially more severe impacts than identified in the EA/IS. The EA/IS describes the criteria used in determining the significance of environmental impacts.

3.1 ENVIRONMENTAL IMPACTS ASSOCIATED WITH THE CANAL FISH SCREEN PROJECT MODIFICATIONS

AESTHETICS

Chapter 3 of the EA/IS identifies visual resources in the project area and potential impacts on visual resources. Essentially there is no change to Project aesthetics from the original Negative Declaration and Addendum No. 1. No significant aesthetic impacts would result from implementation of the Project.

AIR QUALITY

Chapter 3 of the EA/IS and Addendum No. 1 describe the project's environmental and regulatory setting with respect to air quality. Overall air quality conditions are expected to remain about the same as they are at present, including construction and O&M activity air quality impacts. No significant air quality impacts would result from implementation of the Project.

AGRICULTURAL RESOURCES

Chapter 3 of the EA/IS identifies agricultural resources in the project area and potential impacts on agricultural resources. Essentially there is no change to Project agricultural resources from the original ND and Addendum No. 1. No significant agricultural impacts would result from implementation of the Project.

BIOLOGICAL RESOURCES

Chapter 3 of the EA/IS and Addendum No. 1 describe the project's environmental and regulatory setting with respect to biological resources. There will be no adverse effect on fish habitat or aquatic species as a result of the revised dewatering and storm water control.² No significant biological resource impacts would result from implementation of the Project.

² Dave Mayer, Tenera Environmental, September, 2010.

CULTURAL RESOURCES

The Contra Costa Canal was determined eligible for listing in the National Register of Historic Places at the state and local level in March 2005. In October 2006 the State Historic Preservation Office (SHPO), Reclamation and CCWD agreed to terms of a Memorandum of Agreement (MOA) for impacts associated with replacement of the unlined Canal. The conditions associated with the October 2006 MOA can be used for the Rock Slough Fish Screen project and the current dewatering and storm water Project. With the implementation of the SHPO, Reclamation and CCWD MOA, there would be no significant impacts on cultural resources from the Project.

GEOLOGY, SEISMICITY, AND SOILS

Chapter 3 of the EA/IS describes the geologic, seismic, and soil conditions within the project area. Essentially there is no change to Project geologic conditions from the original EA/IS and Addendum No. 1. No significant geologic impacts would result from implementation of the Project.

HAZARDS & HAZARDOUS MATERIALS

Chapter 3 of the EA/IS discusses existing conditions and potential impacts associated with hazardous materials. Essentially there is no change to Project hazardous materials from the original EA/IS and Addendum No. 1. No significant hazardous materials impacts would result from implementation of the Project.

HYDROLOGY & WATER QUALITY

Chapter 3 of the EA/IS describes the project's environmental and regulatory setting and impacts with respect to hydrology and water quality.

Water Quality- The modified dewatering plan will result in the discharge of groundwater to Rock Slough during the winter period as compared to the discharge of groundwater to local irrigators. Stormwater will be discharged from the Rock Slough extension into Rock Slough. Reclamation will obtain a low threat discharge permit from the Central Valley Regional Water Quality Control Board (CVRWQCB). Dewatering and control of storm water will be implemented consistent with CVRWQCB requirements. No significant adverse surface water, groundwater/drainage, or water quality impacts would result from implementation of the Project.

LAND USE AND PLANNING

Chapter 3 of the EA/IS identifies land uses in the Project area. Existing land use in the area remains similar to land uses in the original EA/IS and Addendum No. 1. No significant land use impacts would result from implementation of the Project.

MINERAL RESOURCES

Chapter 3 of the EA/IS describes mineral resources as nonexistent in the project area. No impacts on mineral resources are anticipated.

NOISE

Chapter 3 of the EA/IS describes noise in the rural part of Contra Costa County as generally low with common noise intrusions associated with natural sources such as wind, domestic animals and wildlife, or isolated human activity. Essentially there is no change to Project noise from the original EA/IS and Addendum No. 1. There would be no significant noise impacts from the Project.

POPULATION & HOUSING

Chapter 3 of the EA/IS evaluates the Project's potential to cause changes in area population and housing. Essentially there is no change to Project population and housing from the original EA/IS and Addendum 1. There would be no adverse impacts on area population and housing.

RECREATION

Chapter 3 of the EA/IS describes recreation providers in the project area. Essentially there is no change to recreation amenities in the Project area from the original EA/IS and Addendum No. 1. Recreational activities would not be significantly impacted by the Project.

TRANSPORTATION/TRAFFIC

Chapter 3 of the EA/IS identifies roadways in the Project area. The fish screening facilities will be served by existing public roadways to the area. Essentially there is no change in transportation/traffic in the Project area from the original EA/IS and Addendum No. 1. There would be no significant traffic impacts from the Project.

UTILITIES & SERVICE SYSTEMS

Chapter 3 of the EA/IS describes public service providers in the project area and evaluates impacts associated with project construction. Essentially there is no change to Project utilities and service systems from the original EA/IS and Addendum 1. No public service or utility impacts would be associated with the Project.

MANDATORY FINDINGS OF SIGNIFICANCE

The currently proposed dewatering and storm water control aspects of the Fish Screen project would be constructed and operated in an area that is already disturbed. Mitigation measures from Addendum No. 1 and the original EA/IS adopted by the CCWD Board of Directors will minimize and avoid potentially significant impacts to biological and cultural resources.

Project impacts are short-term and related to construction of the fish screens and related facilities and are not thus anticipated to combine with effects of other projects to result in cumulatively considerable impacts.

Mitigation for short-term air quality impacts were approved as part of Addendum No. 1. With mitigation as described in Addendum No. 1 there would be no significant air quality impacts.

SECTION 4

CONCLUSION

No important revisions are needed in the Fish Screen Project EA/IS. No further evaluation is required and no supplemental or subsequent MND is needed pursuant to state CEQA Guidelines Sections 15162 and 15164.

Based on the analysis and discussion in Sections 2 and 3, there are no new significant impacts or substantially more severe impacts that would result from the implementation of the dewatering and storm water control components of the fish screen project. The project area's circumstances have not changed enough that new significant environmental impacts or substantially more severe impacts would result. Moreover, no new information has become known that would indicate the potential for new significant impacts or substantially more severe impacts requiring mitigation measures than were discussed in the EA/IS and Addendum No. 1.

References

Contra Costa Canal Intake (Rock Slough) Fish Screening Project Finding of No Significant Impact & Environmental Assessment & Initial Study, U.S. Dept. Of the Interior, September 5, 1997.

Final Contra Costa Pumping Plant Mitigation Program Contra Costa Canal Intake (Rock Slough) Fish Screening Project Notice of Determination and Negative Declaration, October 22, 1997.

Mitigation Monitoring and Reporting Program for the Contra Costa Canal Replacement Project. Updated as of September 17, 2007 to reflect the March 21, 2007 ASIP and all permits and Regulatory Requirements.

Report on Fish Screening Alternatives for the Contra Costa Canal Intake (Rock Slough), California, Liston et al, August 23, 1996.

Los Vaqueros Biological Opinion, U.S. Fish and Wildlife Service, 1993.

USACE Letter dated September, 1999.

Action Specific Implementation Plan, Contra Costa Canal Replacement Project, Contra Costa Water District/Bureau of Reclamation, March 21, 2007.

Contra Costa Pumping Plant Mitigation Program, Contra Costa Canal (Rock Slough) Fish Screening Project Negative Declaration Addendum, June 3, 2009.

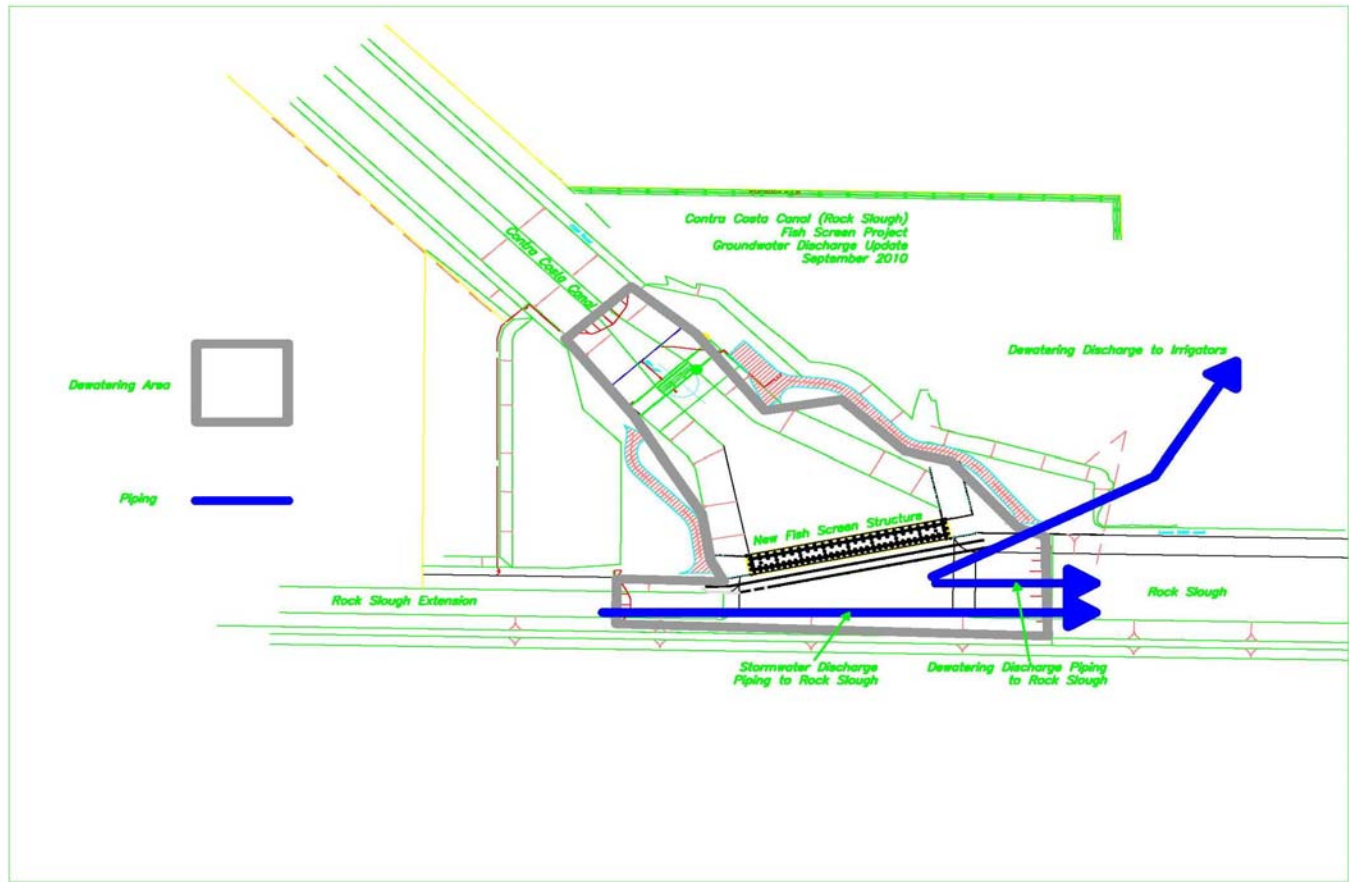


Figure 3- Groundwater Discharge Plan

FINAL

CONTRA COSTA PUMPING PLANT MITIGATION PROGRAM

Contra Costa Canal Intake (Rock Slough)

Fish Screening Project

NOTICE OF DETERMINATION

and

NEGATIVE DECLARATION

October 22, 1997

Prepared By:

State of California
Department of Water Resources
3251 "S" Street
Sacramento, California 95816-7017

Prepared For:

U.S. Department of the Interior
Bureau of Reclamation
Mid-Pacific Region
2800 Cottage Way
Sacramento, California 95825-1898

State of California
Department of Water Resources
3251 "S" Street
Sacramento, California 95816-7017

Notice of Determination

Form C

To: X Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

From: (Public Agency) Department of Water Resources
Environmental Services Office, 3251 S St.,
Sacramento, CA 95816

— County Clerk
County of _____

Subject:

Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

Contra Costa Pumping Plant Mitigation Program - Contra Costa Canal Intake (Rock Slough) Fish Screening Project

Project Title

97092079	Dale Hoffman-Floerke	(916) 227-7530
State Clearinghouse Number	Lead Agency Contact Person	Area Code/Telephone/Extension

Off Rock Slough, south of Big Break and Dutch Slough in Contra Costa County

Project Location (include county)

Project Description: Department of Water Resources (Department) and the Bureau of Reclamation (Bureau) propose to design and construct the Contra Costa Canal Intake Fish Screen Project, a feature of the Contra Costa Pumping Plant Mitigation Program. The Program will mitigate for fishery impacts resulting from operations of the Contra Costa Canal Pumping Plant No. 1 and will enable the Department and the Bureau to comply with the Los Vaqueros Project Biological Opinion for delta smelt. The fish screen structure (390-feet long) will include: log boom, fish screens, steel blocking panels, two trash rakes, a precast concrete operating deck, baffle guides, adjustable baffles, differential water level probes, a check or control structure, and open water and wetland habitat mitigation. A temporary bypass channel will be required during construction but will be reclaimed. A seven acre Operation and Maintenance yard and disposal area will also be constructed.

This is to advise that the Department of Water Resources & Bureau of Reclamation have approved the above described

☒ Lead Agency ☐ Responsible Agency

project on Oct. 22, 1997 and have made the following determinations regarding the above described project:

1. The project (☐ will ☒ will not) have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures (☒ were ☐ were not) made a condition of the approval of the project.
4. A statement of Overriding Considerations (☐ was ☒ was not) adopted for this project.
5. Findings (☒ were ☐ were not) made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval is available to the General Public at:
The final Negative Declaration is available at the Department of Water Resources, Environmental
Services Office, 3251 S St., Sacramento, CA 95816

RL Brown
Signature (Public Agency)

10/20/97
Date

CEA
Title

Date received for filing at OPR:

FILED
OCT 22 1997
STATE
CLEARINGHOUSE

Determination

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A NEGATIVE DECLARATION will be prepared.

☐

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐

I find that the proposed project MAY have a significant effect(s) on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐

I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.

☐

RL Brown

Signature

9/8/97

Date

Randall L Brown

Printed Name

DWR

For (Lead State Agency)

Richard Raines
US Bureau of Reclamation
PO Box 25007
Denver, CO 80225

September 23, 1997

Dear Rich,

Please find enclosed one copy each of the Notice of Completion and Negative Declaration for the Contra Costa Canal Intake Fish Screening Project. When the Notice of Determination is filed, I'll send you a copy of that as well. If you need anything else, please give me a call at (916) 227-2557.

Sincerely,

Heidi Bratovich

Heidi Bratovich



Heidi Rooks Bratovich
Environmental Specialist IV (Supv)

Department of Water Resources
Environmental Services Office
Environmental Assessment
3251 S Street
Sacramento, CA 95816-7017

Office (916) 227-2557
CALNET 498-2557
FAX (916) 227-7554
E-mail: hbratovi@water.ca.gov

Notice of Completion

Form A

See NOTE below

Mail to: State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814 916/445-0613

SCH # **97092079**

Project Title: Contra Costa Pumping Plant Mitigation Program- Contra Costa Canal Intake Fish Screening Project
Lead Agency: Department of Water Resources **Contact Person:** Dale Hoffman-Floerke
Street Address: 3251 S St. **Phone:** (916) 227-7530
City: Sacramento, CA **Zip:** 95816 **County:** Sacramento

Project Location

County: Contra Costa **City/Nearest Community:** Oakley
Cross Streets: _____ **Zip Code:** _____ **Total Acres:** 24
Assessor's Parcel No. _____ **Section:** _____ **Twp.** _____ **Range:** _____ **Base:** _____
Within 2 Miles: **State Hwy #:** _____ **Waterways:** Off Rock Slough, south of Big Break and Dutch Sl
Airports: _____ **Railways:** Atchison Topeka & Santa Fe Railroad **Schools:** _____

Document Type

CEQA: ☐ NOP ☐ Supplement/Subsequent **NEPA:** ☐ NOI **Other:** ☒ Joint Document
☐ Early Cons ☐ EIR (Prior SCH No.) ☒ EA ☐ Final Document
☒ Neg Dec ☐ Other _____ ☐ Draft EIS ☒ Other Initial Study
☐ Draft EIR ☐ FONSI

Local Action Type

☐ General Plan Update ☐ Specific Plan ☐ Rezone ☐ Annexation
☐ General Plan Amendment ☐ Master Plan ☐ Prezone ☐ Redevelopment
☐ General Plan Element ☐ Planned Unit Development ☐ Use Permit ☐ Coastal Permit
☐ Community Plan ☐ Site Plan ☐ Land Division (Subdivision, Parcel Map, Tract Map, etc.) ☒ Other Fish Screen Construction

Development Type

☐ Residential: Units _____ Acres _____ ☒ Water Facilities: Type Fish Screen MGD _____
☐ Office: Sq.ft. _____ Acres _____ Employees _____ ☐ Transportation: Type _____
☐ Commercial: Sq.ft. _____ Acres _____ Employees _____ ☐ Mining: Mineral _____
☐ Industrial: Sq.ft. _____ Acres _____ Employees _____ ☐ Power: Type _____ Watts _____
☐ Educational _____ ☐ Waste Treatment: Type _____
☐ Recreational _____ ☐ Hazardous Waste: Type _____
☐ Other: _____

Project Issues Discussed in Document

☒ Aesthetic/Visual ☒ Flood Plain/Flooding ☐ Schools/Universities ☒ Water Quality
☒ Agricultural Land ☐ Forest Land/Fire Hazard ☐ Septic Systems ☒ Water Supply/Groundwater
☒ Air Quality ☒ Geologic/Seismic ☒ Sewer Capacity ☒ Wetland/Riparian
☒ Archeological/Historical ☒ Minerals ☒ Soil Erosion/Compaction/Grading ☒ Wildlife
☐ Coastal Zone ☒ Noise ☐ Solid Waste ☒ Growth Inducing
☒ Drainage/Absorption ☒ Population/Housing Balance ☐ Toxic/Hazardous ☒ Landuse
☒ Economic/Jobs ☒ Public Services/Facilities ☒ Traffic/Circulation ☐ Cumulative Effects
☒ Fiscal ☐ Recreation/Parks ☒ Vegetation ☐ Other _____

Present Land Use/Zoning/General Plan Use

Agriculture and open space

Project Description

See attached statement.

NOTE: Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. from a Notice of Preparation or previous draft document) please fill it in.

Revised October 1989

Negative Declaration
Contra Costa Pumping Plant Mitigation Program
Contra Costa Canal Intake (Rock Slough) Fish Screening Project

Project description: California Department of Water Resources (Lead State Agency) and the Bureau of Reclamation (Lead Federal Agency) propose to design and construct the Contra Costa Canal Intake (Rock Slough) Fish Screen Project, a feature of the Contra Costa Pumping Plant Mitigation Program (Program) established to meet the statutory requirements of Public Law 102-575, Title XXXIV, the Central Valley Project Improvement Act (CVPIA), as specified in Section 3406(b)(5). The Program will mitigate for fishery impacts resulting from operations of the Contra Costa Canal Pumping Plant No. 1. The Contra Costa Canal Intake (Rock Slough) Fish Screen Project will enable the Department and the Bureau to comply with the Los Vaqueros Project Biological Opinion for delta smelt as issued by the U.S. Fish and Wildlife Service in 1993. The Biological Opinion required that entrainment losses of delta smelt (fish drawn into the canal and Pumping Plant No. 1) be reduced through screening of the Rock Slough intake.

The Contra Costa Canal (Rock Slough) Intake is located off Rock Slough on the lower San Joaquin River, just south of Big Break and Dutch Slough, approximately 4 miles southeast of Oakley, Contra Costa County, California. The fish screen structure, approximately 390-feet long, would be located at the entrance of the Contra Costa Canal in Rock Slough (Site B West) (Figure 1 & 2) and will include:

- Log boom
- Fish screens from the invert (El. -7.6) to El. +1.0
- Steel blocking panels from El. +1.0 up to the operating deck of this structure.
- Two trash rakes with a conveyance system.
- Water hyacinth control by blocking the intake with a log boom.
- A precast concrete operating deck
- Baffle guides downstream of the fish screens
- Adjustable baffles, if required.
- Differential water level probes
- A check or control structure may be incorporated to minimize tidal effects.

The fish screens will screen flows from Rock Slough directly into the Contra Costa Canal. A temporary bypass channel will be required during construction. This temporary bypass will require approximately 47,000 yd³ of excavation. Approximately 2 to 3 acres of land will be required for the temporary bypass. Upon completion of construction, the temporary bypass will be reclaimed.

An Operation and Maintenance yard and disposal area will also be constructed and will occupy 7 acres of land adjacent to the fish screen structure. The exact location of the O & M yard will be determined after coordination with Contra Costa County Planning and Public Works Departments, potentially affected landowners, and potential site developers.

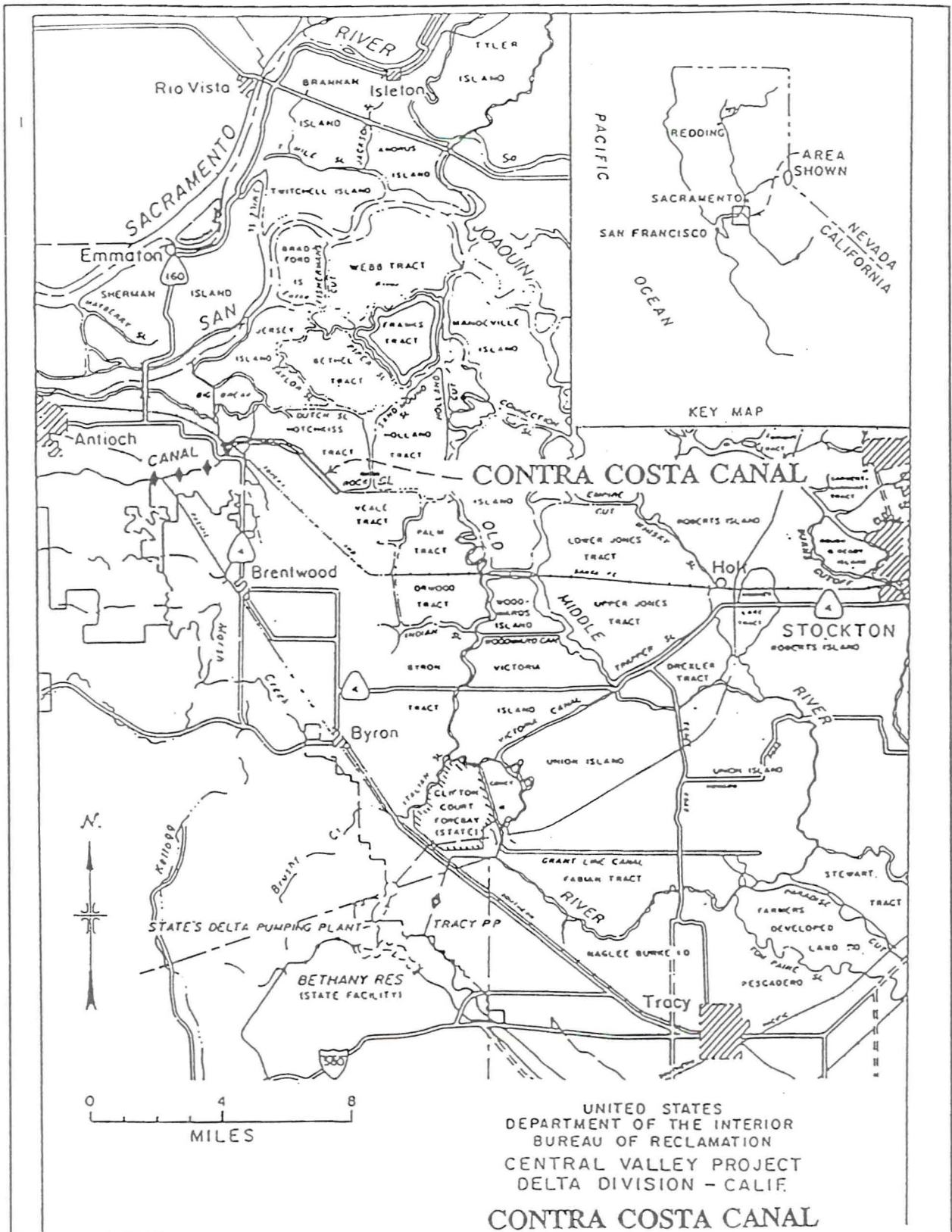


Figure 1. General location of project.

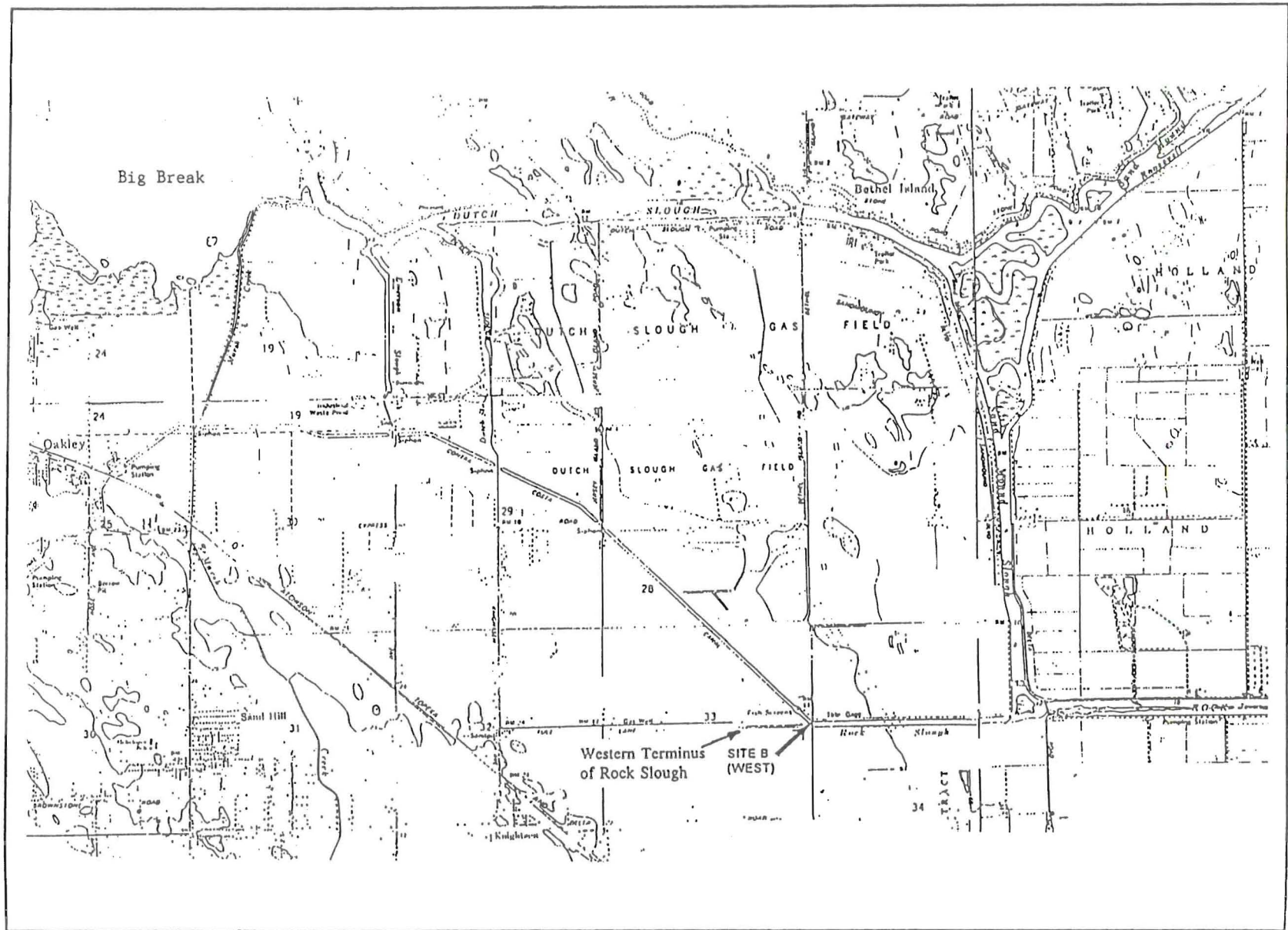


Figure 2. Location of proposed fish screen structure at Site B West in Rock Slough, Contra Costa County.

The Finding: This project will not have a significant negative impact on the environment.

Basis for Finding: Based on the joint Environmental Assessment and Initial Study (attached) and measures the Department and the Bureau are committed to implement, no significant impact will occur as a result of this project. Implementation of the following measures will prevent significant adverse impacts to seismicity, land use and planning, air quality, noise, hazards, water quality, vegetation and wildlife, fisheries, special status species, cultural resources, and transportation/circulation.

Seismicity Because new facilities could be impacted by seismic activity, damage and failure could occur from violent ground shaking. The new facilities will be designed (for seismic loadings) to account for seismic hazards, thereby, reducing the potential environmental consequences that could result.

Land Use and Planning Because O&M yard and debris storage and/or burial pit location has not been determined, the Department, Bureau and the CCWD will coordinate with the Contra Costa County Planning and Public Works Departments, potentially affected landowners, and potential site developers, to locate the O&M yard and debris storage and/or burial pit facilities in an area so as to avoid or lessen impacts to approved and/or proposed land uses in the Project area.

Air Quality It is anticipated that construction activities will likely cause the State 24-hour PM₁₀ standard, 50 micrograms per cubic meter, to be exceeded during peak construction activities. This impact is of concern at residential and other sensitive receptors adjacent to the construction site, if unmitigated. Therefore, the following will be implemented to help control air quality impacts related to construction activities (will be made a part of any construction related contracts):

- (a) Limit traffic speeds on unpaved roadways to 15 miles per hour (mph),
- (b) All active construction areas will be watered at least twice daily;
- (c) All trucks hauling soil, sand, and other loose materials will be required to be covered or must maintain at least 2 feet of freeboard,
- (d) Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites,
- (e) Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites,
- (f) Sweep public roadways daily (with water sweepers) if visible soil material is carried onto adjacent public roadways, and
- (g) Replant vegetation in disturbed areas as quickly as possible.

Also, the following measures will be implemented to help control air quality impacts related to O&M activities whether offsite disposal or onsite vegetational debris burial is the selected debris elimination method:

- (a) The O&M yard will be surfaced with materials which will not inordinately contribute to air quality degradation (e.g., paving with asphalt, concrete, or gravel),
- (b) All stockpiled vegetational debris (i.e., vegetation which is drying prior to offsite disposal or onsite burial), will be hauled to an offsite disposal area or buried onsite at one to four week frequency based on the amount of vegetational debris present,
- (c) All vegetational debris which is buried onsite (i.e., buried in a pit), will be covered with a soil cap at least weekly (pit dimensions are anticipated to be approximately 350 feet to 750 feet in length by 10 feet in width by 10 feet in depth),
- (d) All stockpiled landfill type material (tires, bottles, etc.) which is stored onsite will be required to be deposited into an approved landfill at least monthly (more frequently if materials warrant), and
- (e) All trucks hauling debris, whether vegetative or other landfill type materials, will be required to be covered or they must maintain at least 2 feet of freeboard.

Noise The following measures will be implemented to help control noise impacts related to construction and O&M activities (will be made a part of any construction or O&M related contracts and/or activities):

- (a) Construction and O&M equipment, particularly impact devices and earth moving equipment, will be equipped with manufacturer's noise abatement devices (e.g., mufflers, etc.), and
- (b) Construction and O&M hours will be restricted to daylight hours during weekday periods, such as between the hours of 7 a.m. and 7 p.m.

Hazards State law requires employers and contractors to have an Injury and Illness Prevention Plan (IIPP) in effect to reduce the risk of injury or accident, in compliance with the provisions of State law. Therefore, contractors will be required to comply with State laws and regulations with regard to hazardous materials and worker safety including safety provisions of Cal/OSHA. Additional contractor requirements which will lessen potential hazards for the public (will be required of contractors) are:

- (a) Standard construction practices will be required such as providing barriers and warning signs or devices (i.e., pedestrian and vehicular traffic controls such as detours, using flaggers, and after-hour security patrols), and
- (b) Standby steel plates, or similar devices, will be provided at open trenches to maintain access in construction areas where vehicle traffic is available.

Water Quality Section 404 of the Clean Water Act identifies conditions under which a regulatory permit is required for projects that result in the placement of dredged or fill material into waters of the United States. The U.S. Army Corps of Engineers (Corps of Engineers), Sacramento District, Regulatory Branch, determined that Permit Number 199000070 issued for the Los Vaqueros Reservoir Project (issued pursuant to section 404 of the Clean Water Act and section 10 of the Rivers and Harbor Act of 1899), authorized a fish

screening structure (Special Condition 4 states, "CCWD shall implement all CCWD-related reasonable and prudent measures identified in the Section 7, Endangered Species Act, Biological Opinions for ... Delta smelt (U.S. Fish and Wildlife Service, 9 September 1993". The Department and Bureau will comply with all permit conditions as stipulated in Corps of Engineers Permit Number 199000070.

Pursuant to the Los Vaqueros Reservoir Project Corps of Engineers regulatory permit process, a Clean Water Act Section 401 water quality certification was requested from the California Regional Water Quality Control Board for regulatory activities associated with the Los Vaqueros Reservoir Project (for activities to be covered by the Los Vaqueros Reservoir Project regulatory permit). The California Regional Water Quality Control Board, Central Valley Region, waived section 401 certification. Staff determined that no significant threat to water quality should result from the activities to be permitted.

Stormwater discharges from construction activities involving at least 5 acres of disturbed land must be covered by a Clean Water Act Section 402 National Pollutant Discharge Elimination System (NPDES) permit. A Section 402 "Notice of Intent" and stormwater pollution prevention plan for land disturbance to 24 acres must be submitted to the California Regional Water Quality Control Board prior to any construction, for their review and permitting. No work will begin until a Clean Water Act Section 402 NPDES permit has been issued by the Regional Water Quality Control Board. The Department and the Bureau will comply with all required permit conditions.

Vegetation and Wildlife The Department and Bureau will comply with all vegetation and wildlife resource related permit conditions as stipulated in Corps of Engineers Permit Number 199000070.

An application for a streambed alteration agreement from the California Department of Fish and Game will be made, and an agreement obtained pursuant to Section 1601 of the Fish and Game Code, before initiating construction activity. The Department and Bureau will comply with all required agreement conditions.

To mitigate for terrestrial vegetation and wildlife impacts, as already required for Air Quality impact mitigation, new vegetation will be replanted on all disturbed areas as quickly as possible upon completion of construction. Temporary soil stabilization will be employed for all disturbed areas during construction activities.

To mitigate for open water and wetland impacts which may occur at the existing canal inlet, additional open water and/or wetland habitat will be created. The following Site B West Alternative specific mitigation will be implemented:

The dead end channel of Rock Slough, which extends approximately 2,000 feet west along Tule Lane, will be enlarged and deepened to create replacement open water and wetland

habitat (up to 2.3 acres of habitat) plus additional habitat creation behind the fish screens (enlarging the existing canal inlet approximately 0.5-1.0 acres between the new fish screens and the existing headwaters structure), for a total of approximately 3.5 acres of open water and wetland habitat creation (to replace the approximate 2 acres of existing habitat). Adjacent landowners' pumps will be avoided or relocated.

Fisheries A pre-screen monitoring study will be initiated prior to screen placement. A post-construction evaluation and monitoring plan will be developed prior to fish screen operations (it is assumed that construction of the fish screens will be completed by Federal Fiscal Year 1999, and that early operational tests will take place the same year). The evaluation and monitoring plan will include two elements: an engineering (hydraulic performance and sedimentation) and a biological element (fish entrainment, fish impingement, predator concerns, and debris loadings and interference). These considerations are further addressed in Bureau's Phase II Report (Christensen et. al February 20, 1997). Each element will be used to evaluate different concerns. For the biological element:

- (a) Fish Entrainment - results will be used to evaluate fish screen performance, and to recommend corrective changes should any be necessary.
- (b) Fish Impingement - impingement will be evaluated to determine if the screens are performing correctly, and if any debris loadings are creating hydraulic problems resulting in local areas of increased approach velocities. Corrective recommendations to improve local situations would be made.
- (c) Fish Predators - potential enhanced fish predation around fish screen/intake facilities is always a concern. Any trends in predator densities should be discernable from monitoring studies. Angler surveys may also be utilized. Recommendations will be made to remedy predator concerns.
- (d) Debris Loadings and Interference - recommendations will be made for further debris handling if needed to assure correct screen performance.

If any of these biological evaluations and monitoring studies indicate needed changes in the fish facilities, remedies will be made. Project Technical Team members will be involved in the development of the post-construction evaluation and monitoring plan (representatives from the Department, Bureau, USFWS, NMFS, CDFG, and CCWD).

Special Status Species The U.S. Fish and Wildlife Service found that the project would provide an overall beneficial effect to fish and wildlife resources. The project was found to be in compliance with the Endangered Species Act for those species under the U.S. Fish and Wildlife Service's jurisdiction.

The National Marine Fisheries Service found that the project may provide an overall beneficial effect to winter-run chinook salmon, however, construction and long-term operations and maintenance activities may result in some minimal levels of "incidental take" which should be addressed through consultation and conferencing for winter-run chinook salmon and Central

Valley ESU steelhead. The Department and Bureau anticipate that the screen design which will be utilized will result in no additional "incidental take" from that authorized in the Biological Opinion issued for the long-term operation of the Central Valley Project, in conjunction with the long-term operation of the State Water Project (National Marine Fisheries Service February 12, 1993).

Upon further discussions with the National Marine Fisheries Service, and to better address potential special status species fishery impacts which could occur during construction and/or maintenance activities, windows, dates when construction and/or maintenance activities which could potentially result in "incidental take" to special status fishery species, will be required.

All construction and/or O&M activities which have the potential to result in "incidental take" (e.g., cofferdam placement or maintenance dredging at the screening structure) during the time period of January through the middle of July of each construction and/or O&M year will be prohibited. The Department and Bureau believe that the inclusion of construction and/or O&M windows will accomplish the desired result of eliminating the potential for "incidental take", and thus any identified impacts on listed or proposed species. If data from pre-screen or post-screen monitoring studies indicate that the Department and Bureau may have a take issue, or if special status species issues cannot be dealt with and satisfactorily resolved in the Project Management and Technical Team environment where the National Marine Fisheries Service participates as a team member, the Department and Bureau will immediately initiate formal section 7(a)(2) consultation and/or conferencing, as appropriate with the National Marine Fisheries Service.

Cultural Resources Based on the Bureau's Class II Archeological Survey and report (West and Welch 1996), no historic properties listed or considered eligible for listing on the National Register of Historic Places would be affected by the project. However, because the project will involve ground disturbance activities, the following general provision will be included in all construction contracts and also apply to operation and maintenance activities:

"If cultural resources are present in the Contra Costa Canal APE, they must be buried under natural or cultural fill. Such resources will only be discovered from excavation. Should buried cultural resources be encountered during construction and/or operations and maintenance activities, work at the project site should be halted and an archeologist should be contacted to evaluate the find. If human remains are encountered, the county coroner is to be contacted, and if the remains are Native American, the Native American Heritage Commission is to be contacted for finding the "most likely descendent."

Transportation/Circulation The fish screening facilities will be served by existing public roadways to the area. However, onsite access road improvements will be necessary. All new site access roadways will be surfaced with suitable materials so as to prevent erosion and to not contribute to water quality degradation (i.e., graveled).

Therefore, this Negative Declaration is filed pursuant to Section 15072 of the Guidelines for Implementation of the California Environmental Quality Act.

The public review period for this Negative Declaration and joint Environmental Assessment and Initial Study (attached) will end October 22, 1997. All comments or questions should be directed to Dale Hoffman-Floerke, 3251 S St., Sacramento, CA 95816-7017 (916/227-7530 & fax 916/227-7554).



Randall L. Brown, Chief
Environmental Services Office

Date 9/22/97